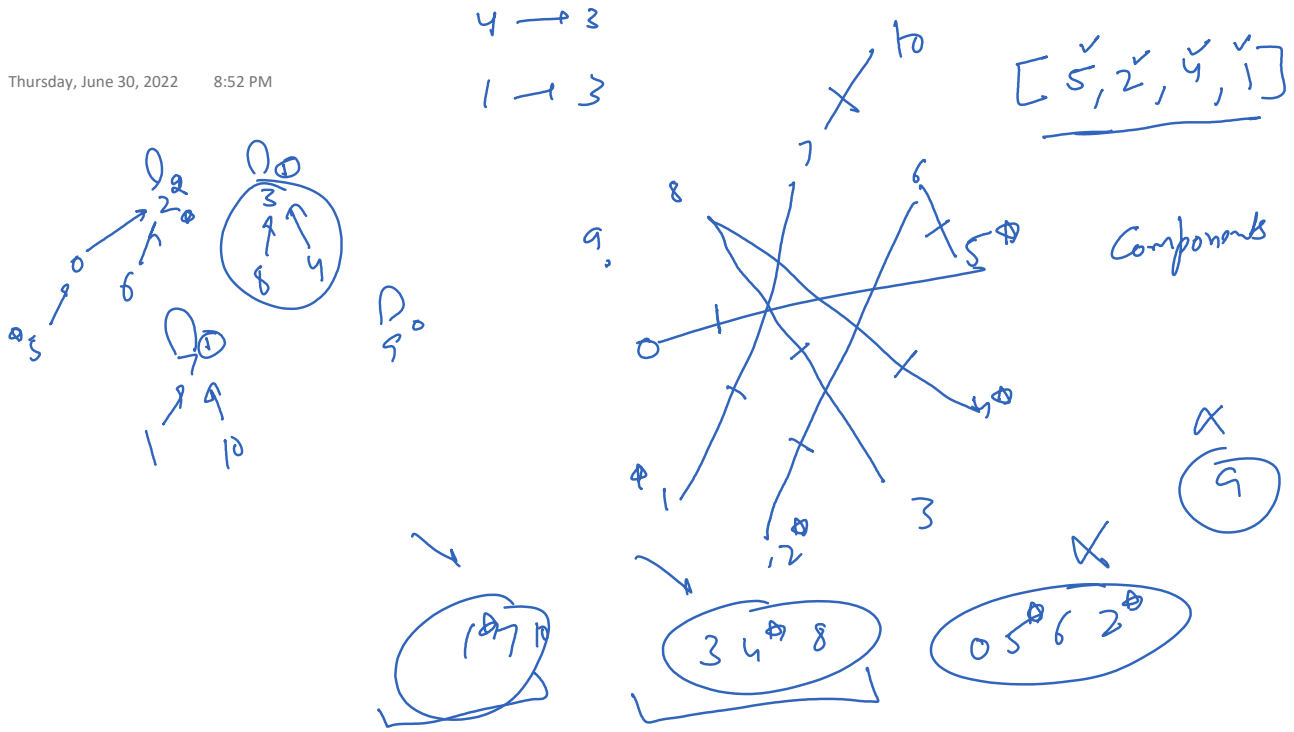
Thursday, June 30, 2022 8:52 PM



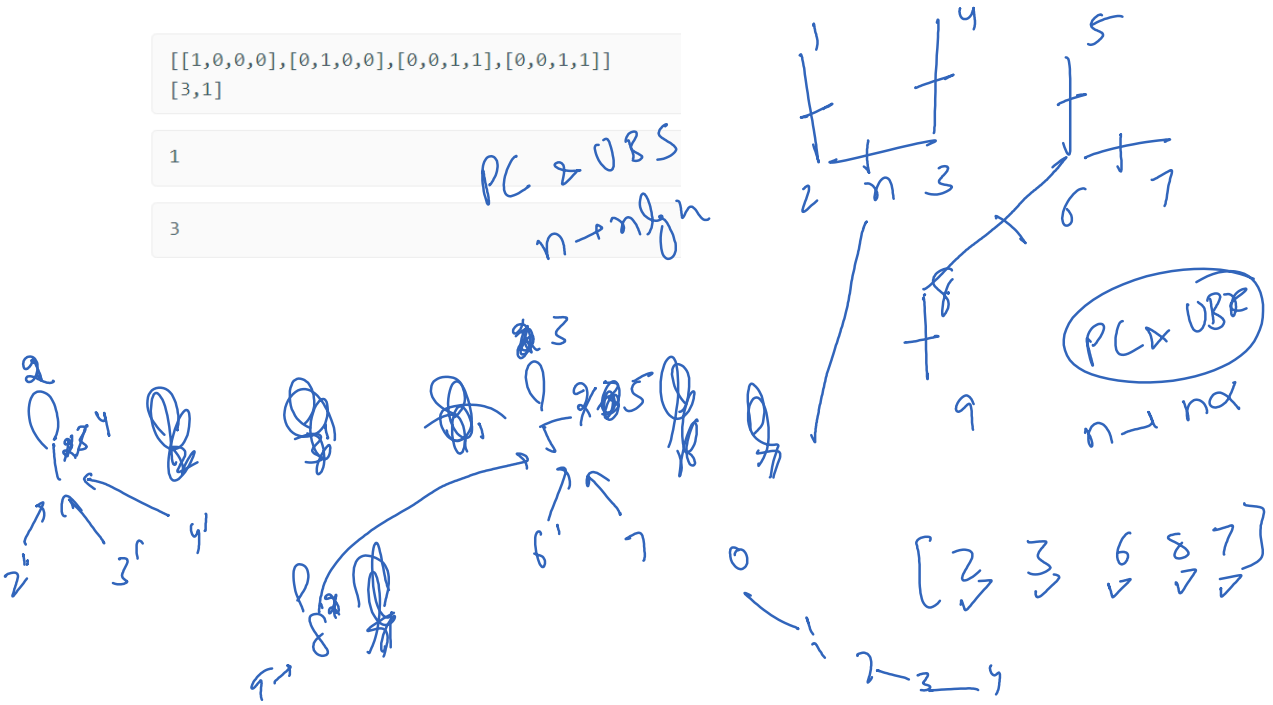

```
[[1,0,0,0],[0,1,0,0],[0,0,1,1],[0,0,1,1]]
[3,1]
```

```
1
```

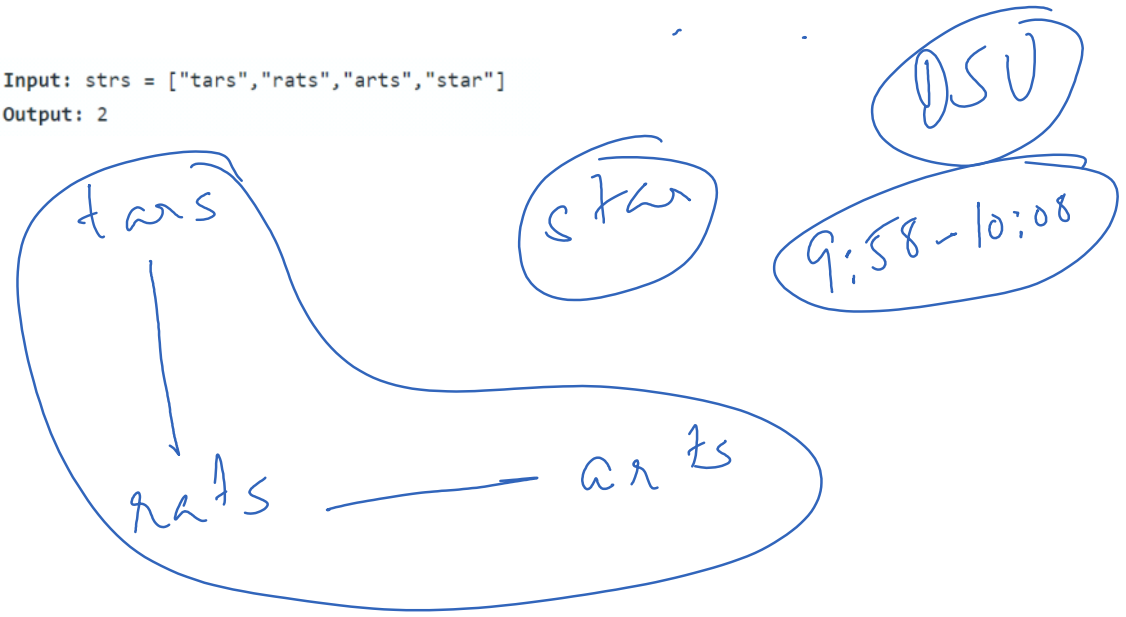
```
3
```

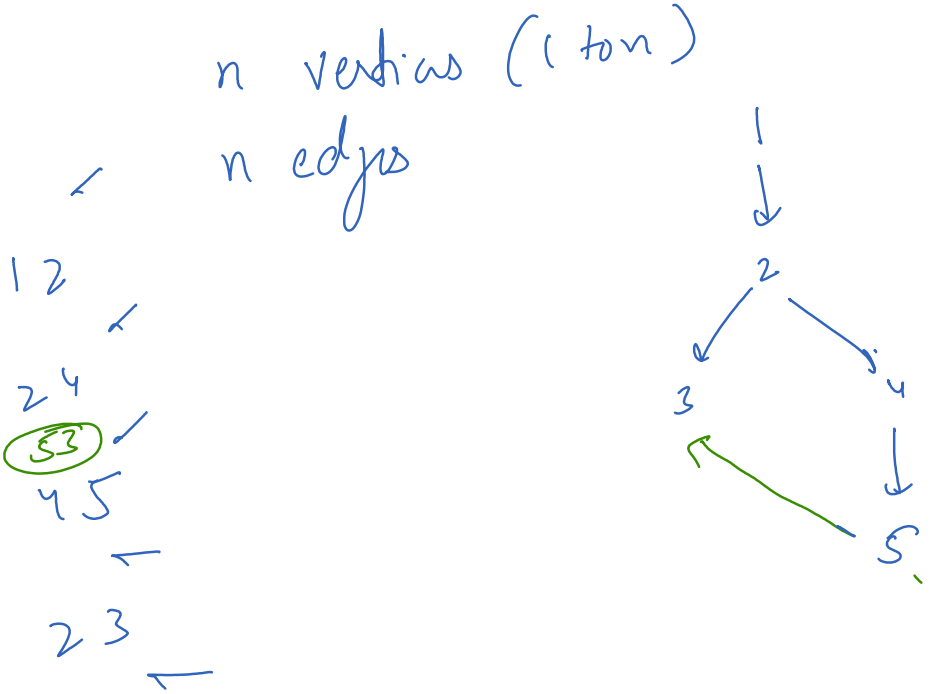
PC & UBS

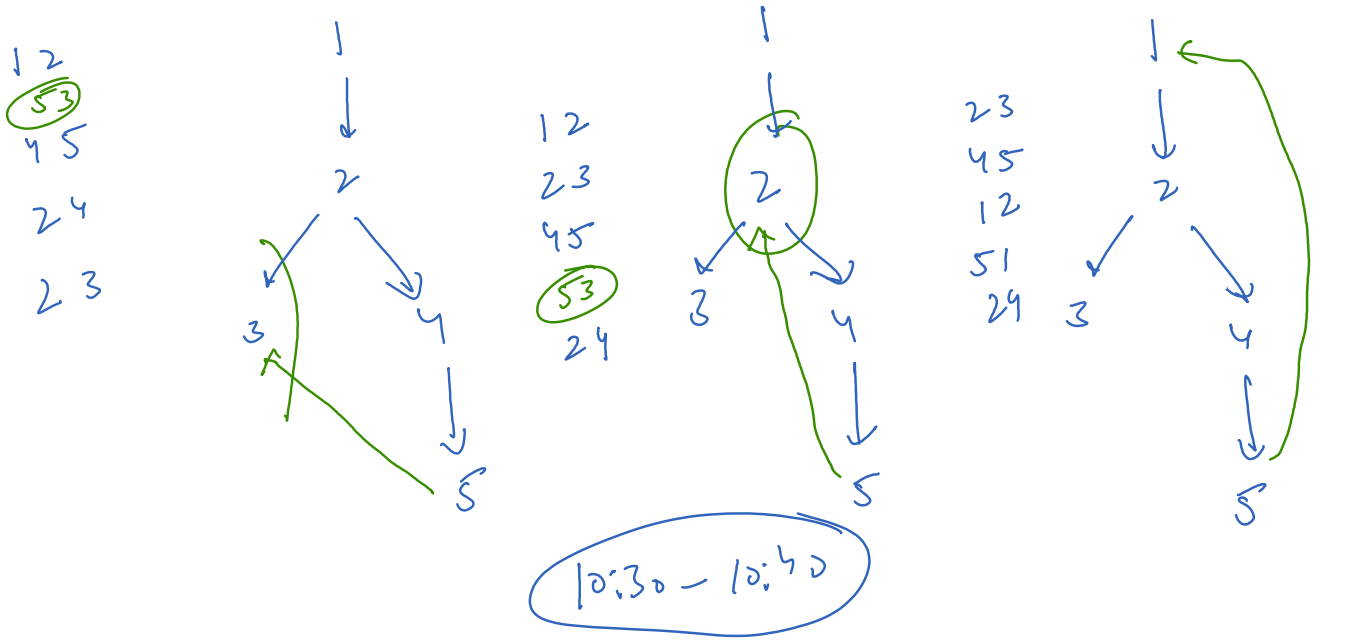
n → n!/n

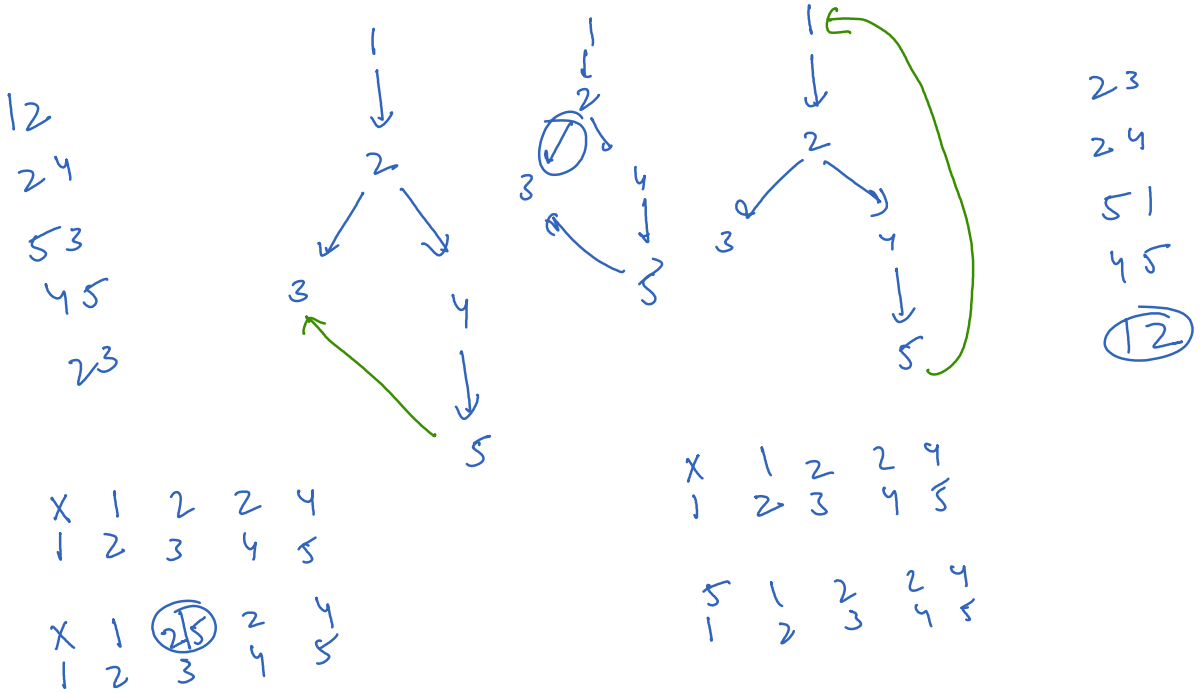


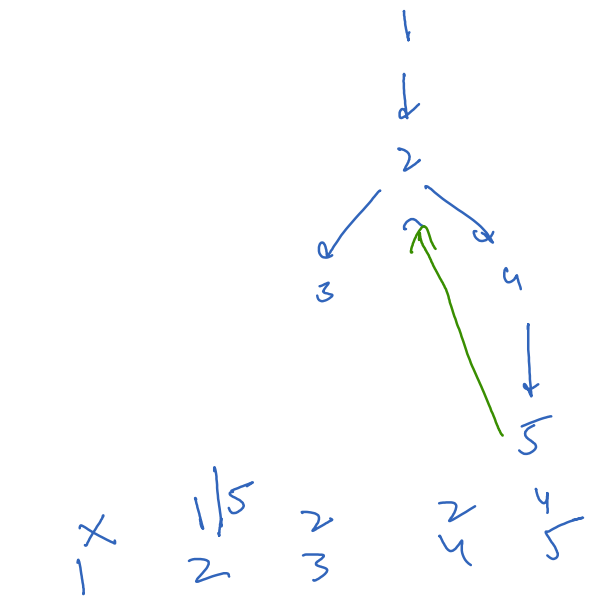
Input: strs = ["tars","rats","arts","star"]
Output: 2






10:30 – 10:40

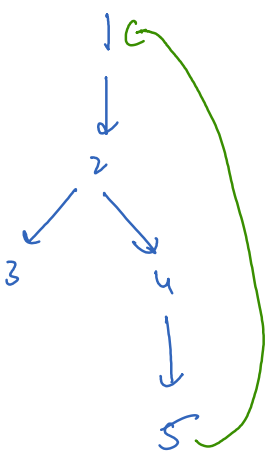




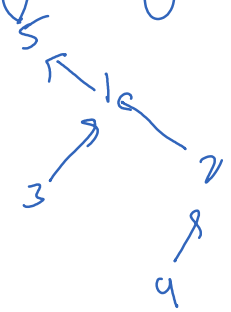
1. No 2 parent → cycle creates.

2. 2 parent → no cycle (2 parent create)

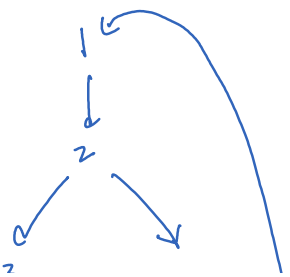
↳ cycle (2 parent edge which is also part of cycle)



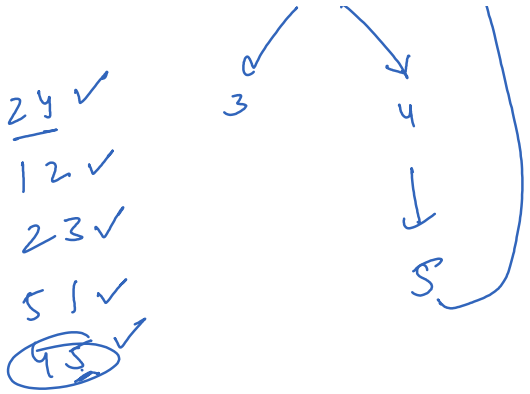
1. No 2 parents → cycle creates



```
for(int i = 0; i < edges.length; i++){
    int from = edges[i][0];
    int to = edges[i][1];

    int fromLead = find(from);
```

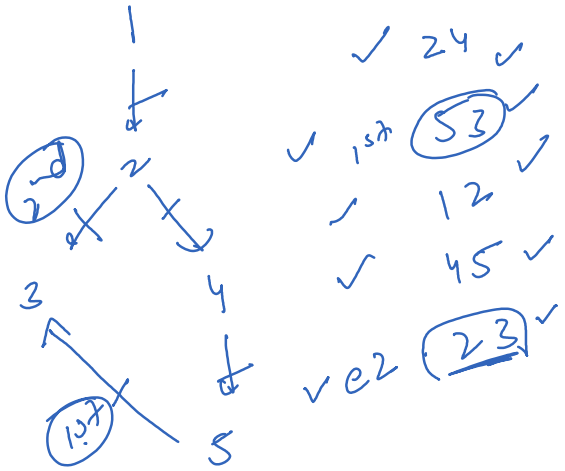


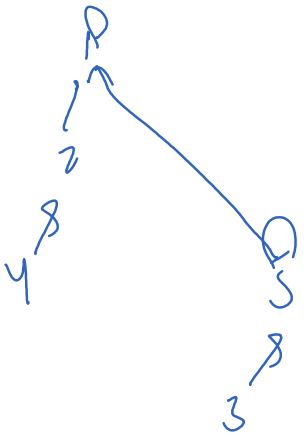
```
        int from = edges[i][0];
        int to = edges[i][1];

        int fromLead = find(from);
        if(to == fromLead){
            res = edges[i];
            break;
        } else {
            dsu[to] = fromLead;
        }
    }
```

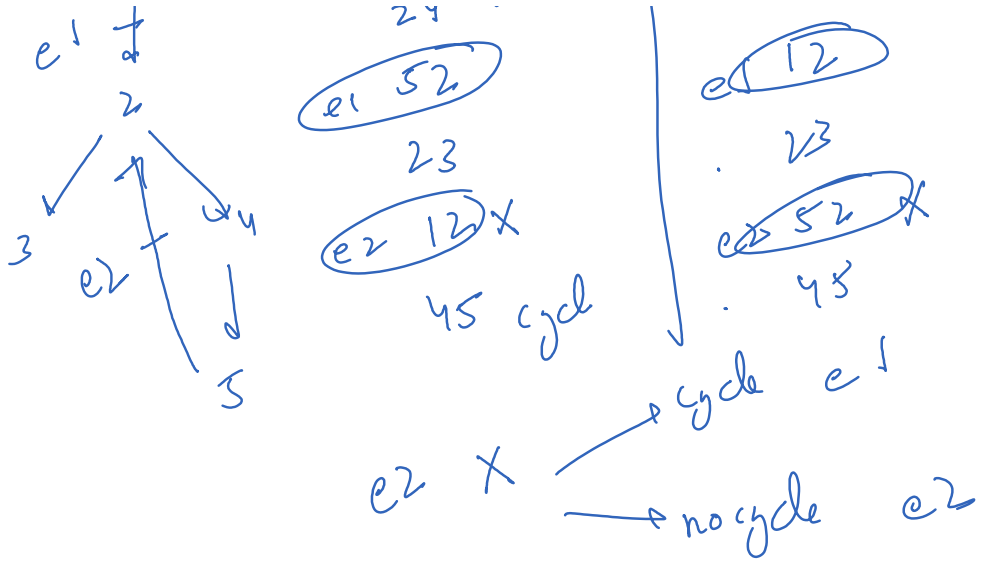


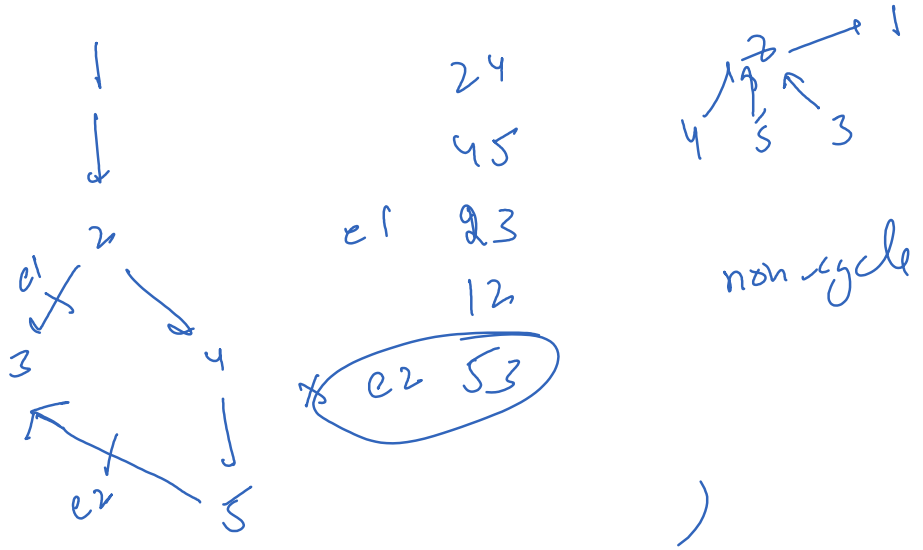
RC2 – No two points less

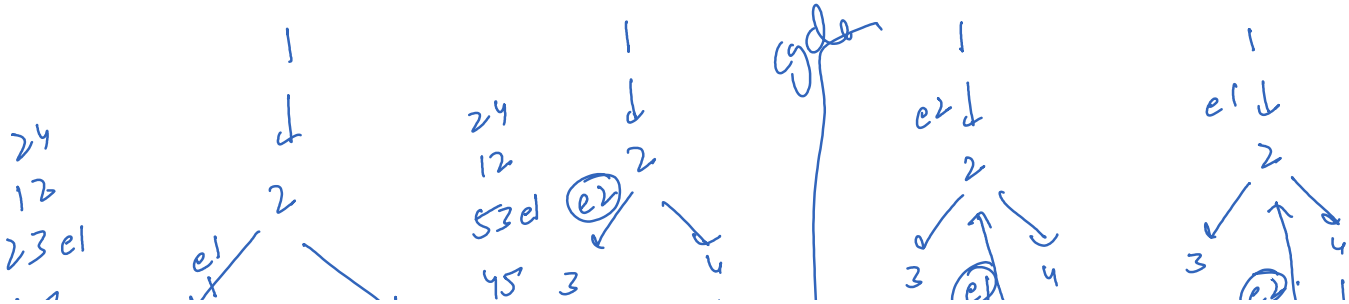
11:18 to 11:22

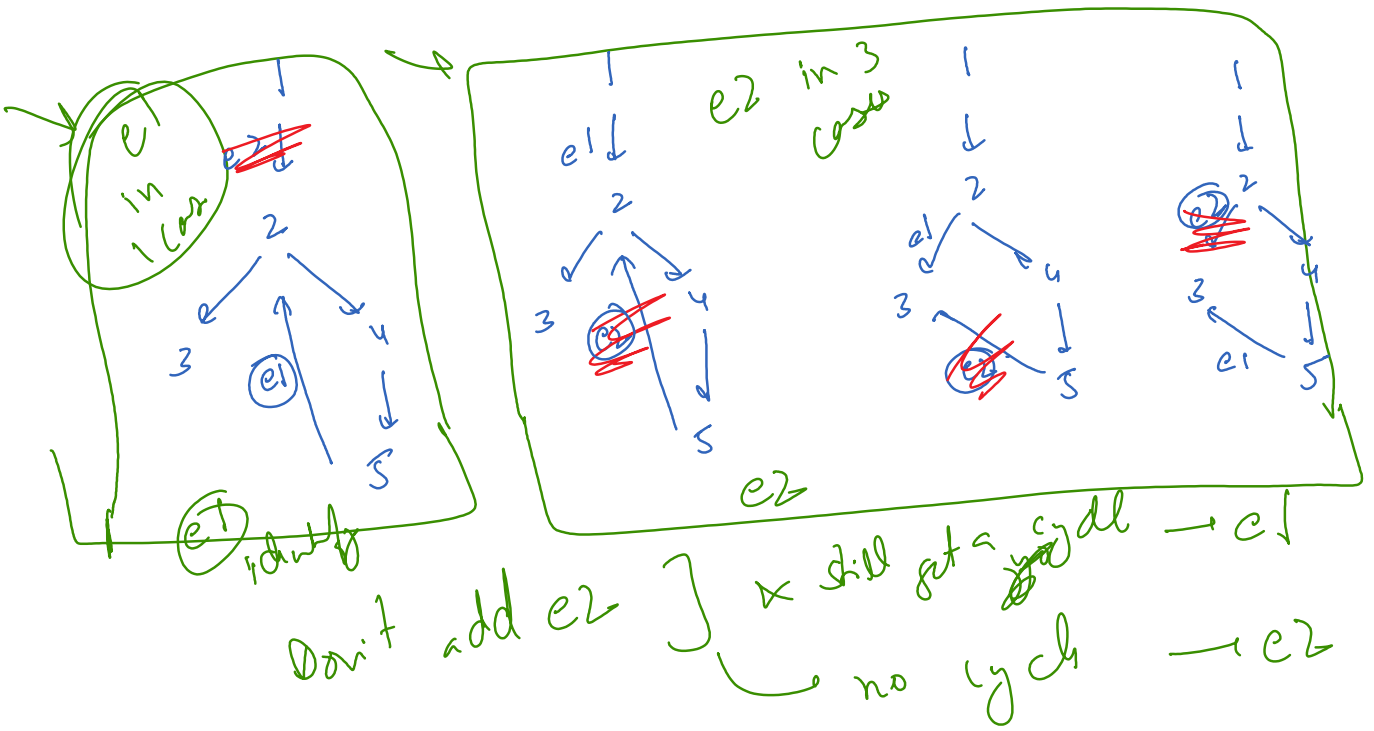





e1
2
3
4
e2
5
24
e1 52
23
e2 12
45 cycle
e1 12
23
e2 52
45
cycle e1
e2
cycle
no cycle e2


1
2
e1
3
4
e2
5
24
45
e1 23
12
e2 53
non cycle


24
12
23 e1
1
2
e1
53 e1
e2
45
3
4
cycle
e2
e1


e1 in 1 cor
identity
e2 in 3 cor
e2
Don't add e2
x still get a cycle → e1
no cycle → e2